

1   **CLAIMS**

2    1.     An assembly comprising the following components:

3         (i)     an engaging head divided into upper, middle and lower portions, wherein the  
4     upper portion contains a raised abutment and an opening, the middle portion contains an  
5     internally threaded hollow tube with outer and inner surfaces, and the lower portion contains  
6     a vertical projection, and

7         (ii)    a tail comprising a pin attached to the lower portion of the engaging head,  
8     wherein said tail has an outer surface and projects away from the engaging head; and

9         (iii)   a sleeve comprising a hollow tubular body, open at both ends, that has outer  
10    and inner surfaces and fits around the lower portion of the of the engaging head and most of  
11    the tail.

12        2.     The assembly of claim 1, wherein the upper portion of the engaging head  
13    contains a raised abutment that encircles an opening.

14        3.     The assembly of claim 1, wherein the middle portion of the engaging head  
15    contains an outer surface that is uneven.

16        4.     The assembly of claim 1, wherein the tail contains one or more undulations on  
17    its outer surface that facilitate a snap connection with the sleeve.

18        5.     The assembly of claim 1, wherein the tail has one end that contains an  
19    opening and another end whose outer surface is at least partially flattened.

20        6.     The assembly of claim 1, wherein the tail has one end that contains an  
21    opening and attachment of the tail to the engaging head is facilitated by inserting this  
22    opening over the lower portion of the engaging head.

23        7.     The assembly of claim 1, wherein attachment of the tail and engaging head is  
24    facilitated by an adhesive.

25        8.     The assembly of claim 1, wherein the sleeve contains one or more undulations  
26    on its inner surface that facilitate a snap connection with the tail.

27        9.     The assembly of claim 1, wherein the sleeve has one end whose inner surface  
28    is at least partially flattened.

29        10.    The assembly of claim 1, additionally comprising a pin relief that fits over one  
30    end of the tail after the tail is inserted into the sleeve.

1 11. A kit for use in making an assembly that partially replicates an implant fixture in a  
2 dental model comprising the following components:

3 (i) an engaging head divided into upper, middle and lower portions, wherein the  
4 upper portion contains a raised abutment and an opening, the middle portion contains an  
5 internally threaded hollow tube with outer and inner surfaces, and the lower portion contains  
6 a vertical projection, and

7 (ii) a cavity preserver that is softer and longer than the lower portion of the  
8 engaging head, formed from a hollow tubular body open on at least one end, capable of  
9 fitting around the lower portion of the engaging head;

10 (iii) a tail comprising a pin; and

11 (iv) a sleeve comprising a hollow tubular body, open at both ends, that has outer  
12 and inner surfaces and fits around the lower portion of the of the engaging head and most of  
13 the tail.

14 11. The kit of claim 10, wherein the upper portion of the engaging head contains a  
15 raised abutment that encircles an opening.

16 12. The kit of claim 10, wherein the middle portion of the engaging head contains  
17 an outer surface that is uneven.

18 13. The kit of claim 10, wherein the cavity preserver is a rubber tube.

19 14. The kit of claim 10, wherein the tail contains one or more undulations on its  
20 outer surface that facilitate a snap connection with the sleeve.

21 15. The kit of claim 10, wherein the tail has one end that contains an opening and  
22 another end whose outer surface is at least partially flattened.

23 16. The kit of claim 10, wherein the sleeve contains one or more undulations on  
24 its inner surface that facilitate a snap connection with the tail.

25 17. The kit of claim 1, wherein the sleeve has one end whose inner surface is at  
26 least partially flattened.

27 18. The kit of claim 1, additionally comprising a pin relief that has an opening tht  
28 fits over one end of the tail.

29 19. A dental model comprising:  
30 a sleeve affixed to a base;

1 a two part analog pin that replicates at least some of the engaging mechanisms in an  
2 implant fixture;  
3 one or more dry set dowel pins.

4 **20.** A method for making a dental model comprising the following steps:

5 (i) positioning an engaging head onto a coping in a dental impression, wherein  
6 said engaging head is divided into upper, middle and lower portions, wherein the upper  
7 portion contains an abutment that mimics an engaging head on an implant fixture, wherein  
8 the middle portion contains an internally threaded hollow tube open at one end that mimics at  
9 least a portion of the internal threads on an implant fixture, and wherein the lower portion  
10 contains a vertical projection;

11 (ii) casting and setting a dental impression to form a die model affixed to the  
12 engaging head;

13 (iii) attaching a tail to the lower portion of the engaging head, wherein said tail is  
14 comprises a pin divided into upper, middle and lower portions, and wherein said pin projects  
15 away from the engaging head;

16 (iv) placing a sleeve around the lower portion of the engaging head and upper and  
17 middle portions of the tail; and

18 (v) casting a base to form a dental model.